

Transport and Environment Committee

10.00am, Thursday, 3 November 2022

Response to motion by Councillor McVey – North Bridge

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1. Recommendations

- 1.1 Transport and Environment Committee is asked to note the contents of this report which, together with the report on [6 October 2022](#), concludes the update requested by the Council on 25 August 2022 on North Bridge.

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Response to motion by Councillor McVey – North Bridge

2. Executive Summary

- 2.1 This report provides an update to Committee in response to the motion by Councillor McVey on North Bridge, which was approved by the Council on [25 August 2022](#).

3. Background

- 3.1 The Category A designated North Bridge carries the A7 over Waverley Station, providing a vital transport link connecting the Old and New Towns of Edinburgh. The bridge comprises three spans, each of approximately 53m, and is of open spandrel construction. Each span has six steel main arch girders with a concrete deck, masonry piers and abutments, and a decorative cast iron façade.
- 3.2 From 2014 through 2015 there were incidences of cast iron, concrete and masonry materials falling from the North Bridge onto Market Street and Platforms 8 and 9 of Waverley Station, as well as onto the station's roof. Starting in 2014 up until 2018, emergency intervention works were undertaken to address serious Health and Safety concerns, which consisted of the installation of a temporary protective netting wrapped around large sections of the bridge.
- 3.3 Balfour Beatty Civil Engineering Limited were initially appointed using an Early Contractor Involvement (ECI) arrangement, prior to undertaking the assessment and design, and then later the construction works; all via the Scape Group Framework Agreement. At this stage, the budget estimate consisted of a scope derived from limited pre-construction investigations, totalling £22.290m.
- 3.4 The original works commenced in June 2018 and comprised structural steelwork repairs, preparation and painting of the structure and facades, repairs to cast iron façades, minor concrete repairs, restoration of the King's Own Scottish Borderers (KOSB) war memorial, and installation of permanent platforms to improve access for future inspections and maintenance.
- 3.5 The current approved budget is £62.182m and is contained within the 10-year [Sustainable Capital Budget Strategy 2022-32](#).

- 3.6 A report on 6 October 2022 provided an update to Committee on North Bridge, and covered the overall project budget, expected completion date, communications, measures on the bridge and looked forward to travel on the bridge once the works are completed.
- 3.7 This report provides a further update on the project, as requested by the Council on 25 August 2022.

4. Main report

Projected budget position of the project

- 4.1 The project budget, approved as part of the Sustainable Capital Budget Strategy 2022-32, remains at £62.182m.
- 4.2 A detailed breakdown of the current approved budget and an update on the project forecast are attached at Appendix 1 (B-Agenda).

Revised projected completion date

- 4.3 As reported in October, the current planned completion date is June 2025 (the term 'planned completion date' is a contractual one which reflects the Contractor's latest programme. This is kept constantly under review in line with the contract and project governance).
- 4.4 Since reporting to the Transport and Environment Committee on [11 November 2021](#), the emerging scope has affected the critical path. The key tasks which materially impacted this, resulting in the current planned completion date, are as follows:
- 4.4.1 Following removal of the surfacing and waterproofing, it became apparent that the central bay "C" (one fifth of the width of the bridge) was in much poorer condition than trial pits undertaken in advance of the project suggested. The options to continue with the current methodology of repairs were considered, including partial replacement of Bay C, however this concluded that the most effective solution was full replacement of the bay. There are specific design constraints governing the sequencing of replacement due to continued traffic loading, i.e. it is not possible to remove and replace the entire length of Bay C at once as only 10 bays per span can be undertaken at one time due to vibration/loading constraints. This change accounted for approximately seven months of the increased programme.
- 4.4.2 Grit blasting and painting had to be re-sequenced due to the concrete repair/replacement works. This work is planned to recommence to the south span following completion of the Bay C structural works in that location. This change accounted for approximately three months of the increased programme.
- 4.4.3 The out-turn scope for removal, repair/replacement and re-installation of the cast-iron facades requires to follow on after the various deck repairs/strengthening works (as the bridge deck will be heavily loaded with

plant and access equipment to facilitate this work) and the sequential completion of the grit blasting and painting works. Given the traffic management arrangements, access to only one elevation at a time is possible, with works commencing to the western elevation and then switching over to the eastern elevation. This change accounted for approximately six months of the increased programme.

- 4.5 The programme continues to be reviewed diligently to identify ways to improve this date, including reviewing options to optimise programme durations wherever practicable. These are considered in conjunction with, for example, limitations on sequence of working, loading safety limits, maintaining efficient working and traffic management restrictions.
- 4.5 The Project Board, which includes senior officers from the Council and Network Rail, regularly scrutinise and review the status of the project with a focus on programme; cost; health, safety and welfare; resolution of strategic matters; risks and issues escalated to the Board; management of dependencies with other areas of the Council; and ensuring that appropriate governance, skills and resources are deployed on the project. The project forms part of the Council's major change portfolio, which is reported to the Council's Corporate Leadership Team (CLT) and to Governance, Risk and Best Value Committee.

Communication with affected stakeholders

- 4.6 There has been a continued focus on proactive communication with affected businesses and other stakeholders. Additional regular meetings are in place, and these have been positive to date with further actions having been agreed.
- 4.7 During a meeting held with the representatives of businesses to the southwest of the bridge (on North Bridge Street) on 26 September 2022, the following key outcomes were agreed:
 - 4.7.1 Restoration of pedestrian crossing and associated measures (see item 4.99 below).
 - 4.7.2 Site welfare cabins adjacent to the business premises are planned to largely remain until the end of 2023, however a review of options to remove or scale down earlier than planned is underway. However, it is important to note that implementing any changes to the current arrangement will have time and cost implications and will require additional funding – these are currently being discussed with the Contractor. Alternative locations on the deck surface have been considered but it has been concluded that this is not feasible during two-way running. Additional detail is provided in Appendix 1.
 - 4.7.3 Engagement with the Council's network management team on the potential to extend the period of one-way running. This team have advised that two-way running must be reinstated in Spring to facilitate other works within the city centre which rely on North Bridge as a key artery for vehicle movements (including public transport).

- 4.7.4 Offer to provide a letter of support from Councillors in relation to an application for temporary business rates relief.
- 4.7.5 A deep clean of the Scotsman Steps has been undertaken, as requested, and a regular maintenance regime is now in place.
- 4.7.6 The Parking Enforcement team has been reminded that the area to the south of the bridge is designated for business deliveries and should be enforced along with adjacent road space, to avoid extended use by members of the public.

4.8 Updates will continue to be issued widely as the works progress, particularly when there is certainty on the specific date of the planned return to two-way traffic running on the bridge, in Spring 2023. These updates will include a clear timeline and layout of upcoming traffic management arrangements.

Restoration of pedestrian crossing

4.9 This has been reviewed with the Contractor and a quotation has been accepted via the contract mechanisms for the restoration of a temporary pedestrian crossing by 19 November 2022. This will remain in place until such time as the permanent crossing can be re-established and will include supplementary signage and lighting, and the removal of two low-level cabins to increase visibility in the area. CCTV is also being considered.

Measures to improve road safety for people walking, wheeling, and cycling

- 4.10 Currently a barrier remains in place on the edge of eastern footpath. This is being monitored and is still working well, with no issues in respect of pedestrian flows.
- 4.11 The western footpath remains closed, and it is expected that this will continue until Summer 2024. In Summer 2023, the Contractor will be installing repaired and new cast iron facades to the west elevation and will require access to facilitate this work. The Contractor has been asked to review this and to provide options/timings/impacts on the feasibility of introducing a temporary “western” footpath. The Contractor will provide an update as soon as possible.
- 4.12 The Contractor has also been asked to provide options for improvement of walking, wheeling and cycling arrangements across the bridge. Any improvements will not be implemented until after the completion of the central bay replacement works and the planned reintroduction of two-way traffic running on the bridge in Spring 2023.
- 4.13 An update on the options for improvement will be provided in Spring 2023, however it is important to note that it is likely that any such measures are likely to have programme and financial implications for the project.

Medium to long term modes of travel on the bridge once works are completed

4.14 In 2018, four possible bridge layouts were discussed with the Edinburgh City Centre Transformation team. However, at that time, the strategic layout for the city was not yet far enough progressed to decide on a confirmed revised layout for North Bridge. The plans therefore proceeded with reinstating the existing layout as determined to be the best value for the Council at the time.

- 4.15 More recently, discussions have been progressing to link into the development of the Circulation Plan, particularly in relation to timing and production of any draft road layout plans for North Bridge, and to ensure that none of the upcoming deck works would be abortive in the near future. As the Circulation Plan is still identifying the key principles of traffic movements, detailed road layouts are not yet available and are not expected to be ready within the next two to three months.
- 4.16 Any future road layouts on the North Bridge must be in line with the emerging city Circulation Plan, to ensure the layout compliments the overall strategy for the city.
- 4.17 Continuing to reinstate the existing road layout on North Bridge does not preclude any future layouts which may emerge, and there would be minimal abortive works should a preferred, different layout emerge from the Circulation Plan. Importantly, the bridge structure has been designed to accommodate a range of future layouts, including Tram.
- 4.18 To pre-empt the outcome by amending the layouts at this stage, particularly in advance of consultation, would be at great financial and time risk, and would likely result in abortive works. Regardless of the final layout agreed, it would be more cost-effective to deliver these works out with the existing North Bridge Refurbishment contract.
- 4.19 Due to the commercial arrangements with the contractor, any changes at this stage would come at a premium cost and would lengthen the current extended programme. Future reporting on layout, design, costs and implications will form part of the development of the Circulation Plan.
- 4.20 An application has been submitted to Sustrans for funding for the initial design stages of trial Active Travel measures on North Bridge. However, any trial works will not be implemented until after the North Bridge Refurbishment deck works are completed.

5. Next Steps

- 5.1 The project will continue to progress towards completion. The actions noted above will be implemented and progressed, including ongoing meetings with the various relevant stakeholders to provide updates on progress.
- 5.2 An update on the options for improvement (as set out in paragraphs 4.10 – 4.12) will be provided in Spring 2023.

6. Financial impact

- 6.1 Like all ongoing and forthcoming Capital works projects within the Council, this project is experiencing emerging cost pressures related to the unprecedented market conditions, which led to sudden rises in prices from the first quarter of 2022.
- 6.2 Key factors contributing to the increases include contractors no longer being able to absorb strong upward pressure from input costs, rising demand, logistics problems and shortages of materials and labour. As an example specifically relevant to this

project, steel reinforcement increased from £860/t to £1,500/t between March and June 2022, and concrete has increased from £94/m³ to £169/m³ in the same period.

- 6.3 The department for business, energy and industrial strategy's (BEIS) Index of Construction Materials Prices for 'all work' increased by 27.2% in May 2022 compared to the same month in 2021. According to data published by the Building Cost Information Service (BCIS), the price of European Brent crude oil rose to \$100 in Q1 2022 from \$80 in Q4 2021 – a 26% increase. Considering the removal of the red diesel rebate, BCIS has also allowed an uplift in April 2022 of 40% in their fuel price index for construction. This is also having a noticeable effect on cost pressures on this project.
- 6.4 The Office for National Statistics Consumer Prices Index (CPI) rose by 9.4% in the 12 months to June 2022. The Bank of England base rate has been increased to 1.75% and may rise further in the short term.
- 6.5 Whilst the project forecast remains within the range reported to the Transport and Environment Committee on 11 November 2021, Appendix 1 provides additional commentary on this subject.

7. Stakeholder/Community Impact

- 7.1 In addition to the activities identified in 4.6, monthly meetings have been established with the businesses located to the south-west of the bridge along with ad-hoc meetings as required. Other businesses and stakeholders will continue to be informed as required.

8. Background reading/external references

- 8.1 None.

9. Appendices

- 9.1 Appendix 1 – Budget breakdown and update (**B–Agenda**)